

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 02/40971

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M10/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DE 198 49 491 C (DAIMLER CHRYSLER AG) 5 January 2000 (2000-01-05)</p> <p>column 3, line 49 -column 5, line 22; figures 1-4,6</p> <p>---</p> <p>-/--</p>	<p>1-4, 12-14, 24,25, 27-33, 39,40, 47-52, 55,62-65</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

28 August 2003

Date of mailing of the international search report

04/09/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hintermaier, F

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 02/40971

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>PATENT ABSTRACTS OF JAPAN vol. 1995, no. 06, 31 July 1995 (1995-07-31) & JP 07 073908 A (NIPPONDENSO CO LTD), 17 March 1995 (1995-03-17)</p> <p>abstract</p>	<p>1,2,4-6, 11,12, 14,24, 29,32, 34,35, 39,40, 47,49, 52-56, 62,65</p>
P,X	<p>WO 02 27816 A (OVONIC BATTERY CO) 4 April 2002 (2002-04-04)</p> <p>abstract page 9, line 11 - line 31 page 10, line 14 - line 32; figures 8A-8E,,9A,,9B page 28, line 25 - line 27 page 34 -page 35</p>	<p>1-4, 11-14, 23-29, 31-33, 39,40, 46-49, 51,52, 54,55, 61-65</p>
A	<p>DE 195 03 085 A (DEUTSCHE AUTOMOBILGESELLSCH) 12 September 1996 (1996-09-12)</p>	
A	<p>EP 1 033 772 A (TOYOTA MOTOR CO LTD ;MATSUSHITA ELECTRIC IND CO LTD (JP)) 6 September 2000 (2000-09-06)</p>	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/40971

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 19849491	C	05-01-2000	DE 19849491 C1	05-01-2000
JP 07073908	A	17-03-1995	JP 3422048 B2	30-06-2003
WO 0227816	A	04-04-2002	AU 9125001 A	08-04-2002
			WO 0227816 A1	04-04-2002
			US 2002012833 A1	31-01-2002
DE 19503085	A	12-09-1996	DE 19503085 A1	12-09-1996
EP 1033772	A	06-09-2000	JP 2000251951 A	14-09-2000
			JP 2000251953 A	14-09-2000
			EP 1033772 A2	06-09-2000
			US 6482542 B1	19-11-2002
			US 6586132 B1	01-07-2003